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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,750

06/27/2006

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EXAMINER

SAVANI, AVINASH A

ART UNIT

PAPER NUMBER

3749

NOTIFICATION DATE

DELIVERY MODE

03/17/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,750	<b>Applicant(s)</b> KANEKO ET AL.	
	<b>Examiner</b> AVINASH SAVANI	<b>Art Unit</b> 3749	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/28/2007, 6/27/2006, 5/4/2007</u> .                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim limitation of “the door starts to be opened” is unclear because it raises the question: is the door opened to a certain position or has the user merely placed a hand on the door to be opened? The claim will be interpreted in the former; however it is believed that the claim needs amending to further clarify the claim.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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5. Claims 1-5, 11-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lubrina et al [20020179588], further in view of Chandler et al [6874331].

6. With respect to claim 1, Lubrina discloses a heat-cooking apparatus [see FIG 1] comprising: a heating chamber (3) having an opening through which an article-to-be-heated is put into and taken out of the heating chamber [0037]; a door closing with which the opening is opened and closed [0037]; and heating medium generating means for generating a heating medium [0044], the heat-cooking apparatus heating and thereby cooking the article-to-be-heated placed inside the heating chamber by means of the heating medium [0048], wherein the heat-cooking apparatus further comprises: blowing means (14), however does not disclose the air being passed as further claimed. Chandler teaches a similar blowing means that blows air so that the air passes the opening sideways when the door starts to be opened [see abstract]. In view of Chandler, a blowing means initiates a flow of air sideways when the door has been opened. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

7. With respect to claim 2, Lubrina discloses the heat-cooking apparatus of claim 1, wherein the heating medium generating means is steam generating means that generates steam as the heating medium [0041].

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8. With respect to claim 3, Lubrina discloses the heat-cooking apparatus of claim 1, wherein the opening is provided in a front face of the heating chamber, the door is pivotably hinged in a bottom part or top part of a casing for housing the heating chamber so that the door opens vertically with respect to the opening [0037]. This is believed to be true because the type of door claimed is notoriously known in the art.

9. With respect to claim 4, Lubrina discloses the heat cooking apparatus of claim 1, however does not disclose the passing of the air as further claimed.

10. With respect to claim 5, Lubrina discloses the heat cooking apparatus of claim 4, however does not disclose the blowing means as further claimed.

11. With regard to claims 4 and 5, Lubrina discloses the heat cooking apparatus of however Chandler teaches a similar device wherein the blowing means blows the air to the opening so that the air passes an upper part of the opening sideways [see FIG 11] and wherein the blowing means blows the air to the opening so that the air passes a part of the opening above half a vertical dimension thereof sideways [col 5, line 41-55]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means as further claimed because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

12. With respect to claim 11, Lubrina disclose the heat-cooking apparatus of claim 1, however does not disclose the blowing means as further claimed. Chandler teaches a similar device wherein the blowing means blows the air to so that the air passes the opening sideways for a predetermined length of time after the door starts to be opened

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after completion of heat-cooking inside the heating chamber [see abstract, col 8, line 59-67]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

13. With respect to claim 12, Lubrina discloses the heat-cooking apparatus of claim 1, wherein while the heating medium is being supplied to the heating chamber by the heating medium generating means, the blowing means blows the cooling air into an interior of the door in a closed state [0042]

14. .With respect to claim 13, Lubrina discloses the heat-cooking apparatus of claim 1, however does not disclose the blowing means as further claimed. Chandler teaches a similar blowing means wherein the blowing means blows the air so that the air passes the opening sideways in front thereof [col 5, line 41-55]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

15. With respect to claim 16, Lubrina discloses the heat-cooking apparatus of claim 1, further comprising: exhausting means (19) that, with opening operation of the door, exhausts the heating medium inside the heating chamber to outside the heat-cooking

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apparatus [0043]. It is believed that when the door is open, or remains open there will be continuation of venting through the chimney (19).

16. With respect to claim 14, Lubrina discloses a heat-cooking apparatus [see FIG 1] comprising: a heating chamber (3) having an opening through which an article-to-be-heated is put into and taken out of the heating chamber; a door with which the opening is opened and closed [0037]; and heating medium generating means for generating a heating medium [0044], the heat-cooking apparatus heating and thereby cooking the article-to-be-heated placed inside the heating chamber by means of the heating medium [0048], wherein the heat-cooking apparatus further comprises: blowing means (14) that blows air; however does not disclose the blower as further claimed. Chandler teaches a similar blowing means wherein a slit that is provided at a side of the opening and through which the air blown by the blowing means is blown out [see FIG 11, and when the door starts to be opened, an air curtain is formed in front of the opening by the air blown out through the slit [see abstract]. In view of Chandler, a blowing means initiates a flow of air sideways when the door has been opened. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

17. With respect to claim 15, Lubrina discloses the heat-cooking apparatus of claim 14, however does not disclose the slit as further claimed. Chandler teaches a similar

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device wherein the slit is provided in an upper portion of the side of the opening [see FIG 11]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a slit as further claimed because the arrangement was known in the art, yielding the predictable result of preventing escape of a desired temperature and providing a safety means.

18. With respect to claim 17, Lubrina disclose the heat-cooking apparatus of claim 14, further comprising: exhausting means (19) that, with opening operation of the door, exhausts the heating medium inside the heating chamber to outside the heat-cooking apparatus [0043].

19. With respect to claim 18, Lubrina discloses a heat-cooking apparatus [see FIG 1] comprising: a heating chamber (3) having an opening through which an article-to-be-heated is put into and taken out of the heating chamber; a door with which the opening is opened and closed [0037]; heating medium generating means for generating a heating medium [0044], and exhausting means (19) that exhausts the heating medium inside the heating chamber [0043], the heat-cooking apparatus heating and thereby cooking the article-to-be-heated placed inside the heating chamber by means of the heating medium, wherein the heat-cooking apparatus further comprises: blowing means that blows air to the opening [0048], and the exhausting means exhausts the heating medium inside the heating chamber [0043], however does not disclose the blowing means as further claimed. Chandler teaches a similar device wherein with opening operation of the door, the blowing means blows out the air to the opening so that the air passes substantially across the opening [see FIG 11, abstract, col 5, line 41-55]. It



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would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

20. With respect to claim 19, Lubrina discloses the heat cooking apparatus of claim 18, wherein the exhausting means is provided on a side wall of the heating chamber [see FIG 1].

21. With respect to claim 20, Lubrina discloses a heat-cooking apparatus [see FIG 1] comprising: a heating chamber (3) having an opening through which an article-to-be-heated is put into and taken out of the heating chamber; a door with which the opening is opened and closed [0037]; and heating medium generating means for generating a heating medium [0044], the heat-cooking apparatus heating and thereby cooking the article-to-be-heated placed inside the heating chamber by means of the heating medium, wherein the heat-cooking apparatus further comprises: blowing means that blows air [0048]; however does not disclose the slit as further claimed, however it should be understood that the blowing means (14) blows air as claimed at least before the door is opened. Chandler teaches a similar device wherein a slit that is provided at a side of the opening and through which the air blown by the blowing means is blown out [see FIG 11], and after the door is opened, the air is blown out through said same slit to in front of the opening so that the air passes substantially across the opening [see abstract, col 5, line 41-55]. It would have been obvious to a person of ordinary skill in

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the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

22. With respect to claim 21, Lubrina discloses a heat-cooking apparatus [see FIG 1] comprising: a heating chamber (3) having an opening through which an article-to-be-heated is put into and taken out of the heating chamber; a door with which the opening is opened and closed [0037]; and heating medium generating means for generating a heating medium [0044], the heat-cooking apparatus heating and thereby cooking the article-to-be-heated placed inside the heating chamber by means of the heating medium [0048], wherein the heat-cooking apparatus further comprises: blowing means (14) that blows air; and should be understood that before the door is opened, and when the door is closed, the air is blown out into an interior of the door [see FIG 1], however does not disclose the slit as further claimed. Chandler teaches a similar device wherein there is a slit that is provided at a side of the opening and through which the air blown by the blowing means is blown out [see FIG 11], and after the door is opened, the air is blown out through said same slit so that, and when the door is open, the air is blown out so that the air passes the opening sideways [see abstract]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the

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context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

23. With respect to claim 22, Lubrina discloses a heat-cooking apparatus comprising: a heating chamber (3) having an opening through which an article-to-be-heated is put into and taken out of the heating chamber; a door with which the opening is opened and closed [0037]; and heating medium generating means for generating a heating medium [0044], the heat-cooking apparatus heating and thereby cooking the article-to-be-heated placed inside the heating chamber by means of the heating medium [0048], wherein the heat-cooking apparatus further comprises : blowing means that blows (14), however does not disclose the blower as further claimed. Chandler teaches a similar device having a blowing means that blows out air so that the air passes the opening sideways before and after the door is opened [see abstract, FIG 11 col 5, line 41-55]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety. It should be understood that Lubrina at least shows similar blowing characteristics before the door has been opened.

24. With respect to claim 23, Lubrina disclose the heat-cooking apparatus of claim 22, wherein it should be understood that a blowing means blows air as claimed at least before the door is opened, however Chandler teaches a device wherein the blowing means blows out the air so that the air passes the opening sideways in front thereof

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after the door is opened [see abstract]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a blowing means to pass air sideways across the opening when a door has been opened because it was known that the inside temperature will not escape, yielding the predictable result in the context of an oven to prevent heated air from escaping to ensure proper cooking and safety.

25. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lubrina et al ['588], in view of Chandler ['331], further in view of Han et al [6414287].

26. With respect to claim 6, Lubrina discloses the heat-cooking apparatus claim 1, however does not disclose the cooling of the circuit as further claimed. Han teaches as similar device wherein the blowing means has a cooling fan for cooling a power supply circuit board provided inside the apparatus [col 4, line 9-21], and as stated above, Chandler teaches a device wherein the blowing means blows air sucked in from outside the apparatus by the cooling fan to so that air passes the opening sideways [see abstract, col 5, line 41-55]. In view of Han, there is a means to cool the circuit board. It would have been obvious to a person of ordinary skill in the art at the time of the invention to cool the circuit board because it was known that heat will compromise the quality of the circuit board, therefore providing a cooling fan will ensure a longer life of the circuit board, yielding the predictable result of ensuring a long life for the entire apparatus.

27. With respect to claim 7, Lubrina discloses the heat-cooking apparatus of claim 6, however does not disclose the blowing means as further claimed. Chandler teaches a similar blowing means wherein the blowing means includes deflecting means that

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deflects the air sucked in by the cooling fan to blow the air to so that air passes the opening sideways [see FIG 11, col 9, line 35-53]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a deflector with the cooling means because it was known that this will provide a greater control of the direction of blown air.

28. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lubrina et al [588], in view of Chandler ['331], further in view of Austin et al [6561180].

29. With respect to claim 8, Lubrina discloses the heat-cooking apparatus of claim 7, however does not disclose the door as further claimed.

30. With respect to claim 9, Lubrina discloses the heat-cooking apparatus of claim 8, however does not disclose the door as further claimed.

31. With respect to claim 10, Lubrina discloses the heat-cooking apparatus of claim 8, however does not disclose the door as further claimed.

32. With regard to claims 8-10, Lubrina teaches the use of a door [0037], however Austin teaches a similar door device wherein the door has a multiple-glazed portion having a plurality of transparent glass plates arranged to face one another at a predetermined gap from one another so that, when the door is closed, part of the multiple-glazed portion faces at least the opening, and the deflecting means (see Chandler) directs the air sucked in by the cooling fan toward a side of the multiple-glazed portion when the door is closed [see FIG 2, col 3, line 43-67], wherein the door has a support base plate (75, 82) that has an area larger than an area of the multiple-glazed portion and so large as to cover an entire opening-side face of the heating

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chamber in the casing and that supports the multiple-glazed portion from a face thereof facing away from the opening when the door is closed, the support base plate includes an operation portion for setting operation conditions of the apparatus (15) [see FIG 1], and the deflecting means (see Chandler) is built with a decoration box that is provided between the operation portion and the casing, at a side of the multiple-glazed portion when the door is closed [see FIG 1] and wherein the door has a support base plate that has an area larger than an area of the multiple-glazed portion and so large as to cover an entire opening-side face of the heating chamber in the casing and that supports the multiple-glazed portion from a face thereof facing away from the opening when the door is closed, the support base plate includes an operation portion for setting operation conditions of the apparatus [see FIG 1], and wherein Chandler show the deflecting means is built with a protruding portion that protrudes from the casing along surfaces of the multiple-glazed portion and of the support base plate when the door is closed [see abstract of Chandler]. In view of Austin, the door has multiple panels. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a door as claimed because the arrangement was known in the art, yielding the predictable result of preventing heat escape from the oven cavity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AVINASH SAVANI whose telephone number is (571)270-3762. The examiner can normally be reached on Monday- Friday, alternate Fridays off, 7:30-5 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Avinash Savani/  
Examiner, Art Unit 3749

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749

/A. S./  
3/8/2010